

Airstrip Management Plan

Soldier Bar Airstrip

Payette National Forest

Introduction

This management plan covers annual routine operations and maintenance needs for Soldier Bar Airstrip. This facility is located within the Frank Church – River of No Return Wilderness. For non-routine activities or emergency actions, reference the Minimum Requirements Decision Guide – Airstrip Maintenance, for the Frank Church-River of No Return Wilderness (FCRNRW Plan, Standard E-6, pg 2-12; FEIS, Appendix).

Location

Soldier Bar Airstrip is located four miles west of the Middle Fork of the Salmon River, in the Big Creek drainage. It is administered by the Krassel Ranger District, Payette National Forest, Intermountain Region. The airstrip is located at Township 20N, Range 14E, Section 06, with a Latitude of 45° 05.99' and a Longitude 114° 48.06'. Its' FAA identifier is 85U and it lays at an elevation of 4,190 feet.

History of the Airstrip

The Soldier Bar airfield sits on a naturally flat bluff above Big Creek. Given the distinctive level formation, the bar was used frequently by humans far before aircraft arrived. Shoshone Indians camped, hunted, and fished at the site. On August 19, 1879, soldiers in search of the Indians found a large camp on the east end of the high plateau. It contained ten wikiups (pole and brush structures), which the soldiers burned. One day later, while soldiers were leaving, they were taken by surprise. The Indians, who had retreated from the encampment several days earlier, had crept down the rock cliffs from above and attacked. During the skirmish Private Harry Eagan was shot through both thighs. A doctor came to the aid of the wounded private and put him under with chloroform to amputate his leg. He died during the operation. Eagan was buried at the bar, thus creating the name Soldier Bar. (*SOLDIER BAR A Significant Event; Holm Jr.*)

Work on building the airfield began in 1932 with the majority of the labor carried out the following year. USFS employees Bill Parks, John Cook, Tom Coski, and Dan LeVan did most of the work. Cabin Creek resident Merl "Blackie" Wallace provided additional help, packing supplies to the site. In 1933 takeoffs had been made on both runways, which crossed at thirty-degree angles to each other. Bob Johnson of Johnson Flying Service was the first to land on the bar with Travel Air NC8879. At this time the east-west runway measured 1500' and the northeast-southwest one measured 1150'. (*SOLDIER BAR A Significant Event; Holm Jr.*)

A 1938 document lists the strip at 1500' in length.

- Current listed dimensions of the airstrip:
 - Runway 07/25 = 1650' X 15'
 - Sharp dog leg on the west end of the runway
 - Runway inclines from east to west
- A search of the National Transportation Safety Board's Accident Database identifies two known aviation accidents at the airstrip.
 - (1) 06/23/2012 – Cox PA-18 – Private pilot veered off runway upon taking-off from runway 07, rolled into a pile of rocks and came to rest inverted. NTSB determined probable cause to be the pilot's failure to maintain directional control of the aircraft during take-off. No fatalities or injuries occurred.
 - (2) 06/17/2003 – Cessna 206 – Private pilot had the nose gear collapse during rollout after landing. NTSB found the nose gear to be improperly installed and cracks in the system consistent with fatigue. Terrain condition was listed as a factor in the accident, but not the cause. No fatalities or injuries occurred.
 - (3) 08/22/1986 – Cessna A185E – Private pilot was attempting to land with a tailwind at a density altitude of 6300'. During braking, a gust of wind occurred and the aircraft nosed over inverted. No fatalities or injuries occurred.
- Characterization of past maintenance or projects:
 - Installation of water bars – 1980's.
 - Leveling and grading- 2009.
- Soldier Bar's proximity to other airstrips:
 - Lemhi CO (KSMN) 39nm to the E
 - McCall (KMYL) 57nm to the W
 - Taylor Ranch (Private) 2nm to the W
 - Cabin Creek (I08) 6nm to the W

Objectives for Management of the Airstrip

- Maintain the airstrip to a safe operating standard but not enhanced over conditions typical at the time of the passage of the Central Idaho Wilderness Act and in compliance with the Frank Church-River of No Return Wilderness Management Plan.
- Soldier Bar Airstrip will be managed for unrestricted public and commercial use until use levels and evaluations dictate a need to establish use limits.

- Recognize the needs and values of multiple users while ensuring the overall goal of maintaining these facilities to a safe operational standard is accomplished.

Physical Description of the Airstrip

- The airstrip is located within the Big Creek drainage, approximately 4 nm west of the Middle Fork of the Salmon River.
- Elevation of the airstrip is 4190'
- The airstrip is surrounded by steep canyon walls and is located on a bench approximately 500' above Big Creek on the south side.
- Runway Dimensions / Information:

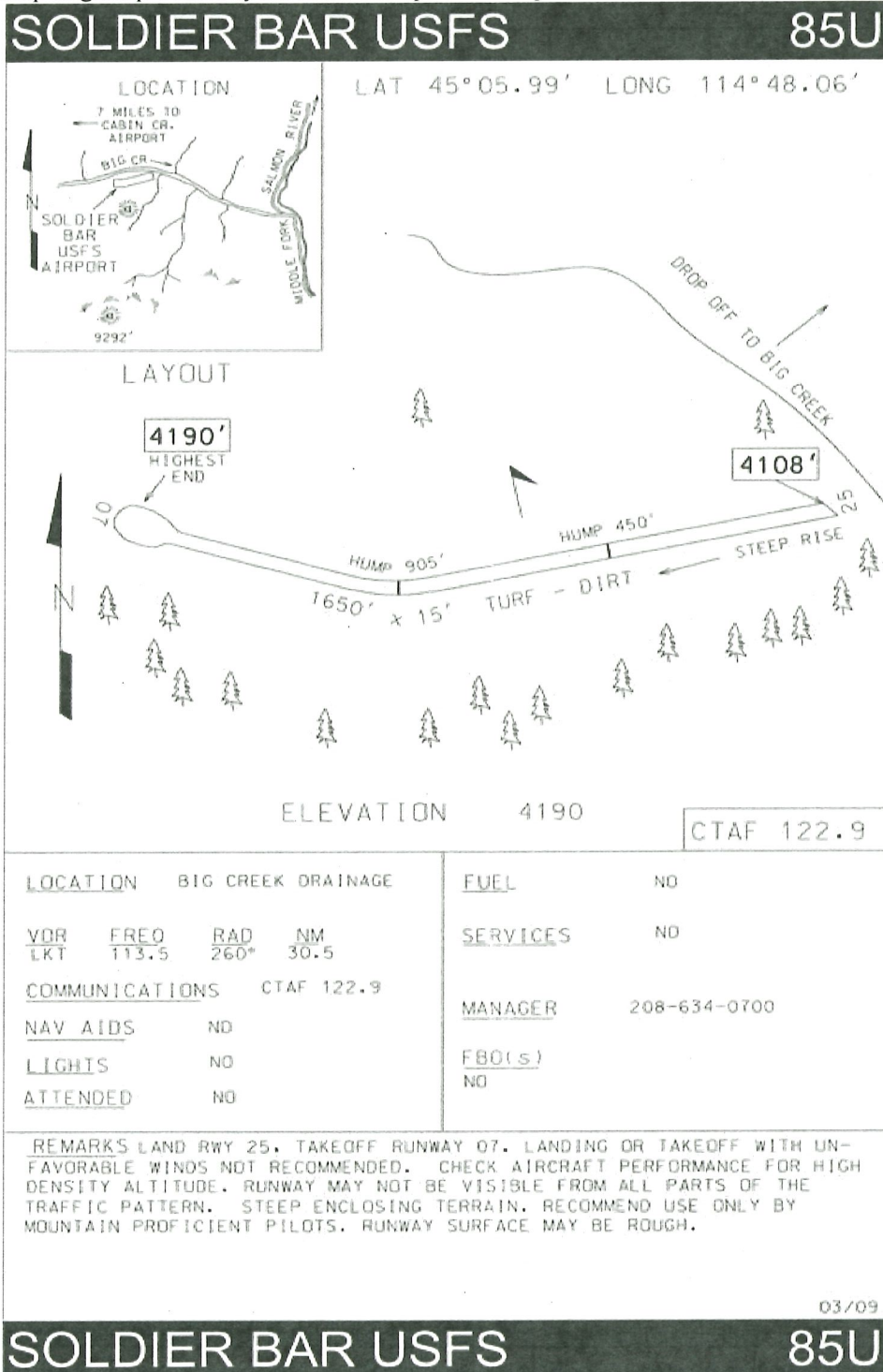
Runway 07/25			
Dimensions		1650' X 15'	
Surface		Turf/Dirt	
Alignment		East – West	
End Markers		N/A	
Side Markers		N/A	
Runway 16		Runway 34	
Traffic Pattern	Left	Traffic Pattern	Left

- Obstructions:

Runway 07: 60' trees 35' from runway

Runway 25: 150' hill 900' from runway, 6:1 slope to clear

- The airstrip is dirt in fair condition, but does contain some rocks.
- A sharp dog leg to the north is located on the west 1/3 of the runway.
- Significant humps are located 450' and 905' from the beginning of runway 25.
- There is no winter maintenance.
- Be aware of rodent activity on and in the vicinity of the runway.
- Big game animals can be on and in the vicinity of the runway.
- West 1/3 of runway has a 4 degree slope down to the north
- There are no Forest Service administrative facilities or staffing at Soldier Bar.



Airstrip Surface Improvements

- An aircraft parking area is located on the southeast side of the runway. No tie-downs are located at this site.
- A turn around area is located on the western most portion of the runway. This is not intended as a parking area.
- A windsock and standard is located on the north side of the runway near midfield. Current dimensions of the windsocks and frames are 24" diameter.
- Rubber water bars traverse the runway surface across much of the airstrip to reduce erosion.

Airstrip Facilities

- A pit style toilet is located near the aircraft parking area.

Use of the Airstrip

- The FAA designation is public ownership, public use.
- The Forest Service listing per FC-RONRW direction is: "The seven (7) designated public use airstrips operated and maintained by the Forest Service will be managed for unrestricted public and commercial use until use levels and evaluations dictate a need to establish use limits." (FC-RONRW Ch. 2-11)
- The IAN current classification is "Wild."
- General season of use is May through November
- The Forest Service utilizes the airstrip to some limited extent for movement of personnel and supplies into the backcountry to support a variety of agency activities.
- Private pilots use the airstrip for wilderness access, camping, hunting and fishing. Pilots must be experienced in backcountry flying and particular attention needs to be given to density altitude in the summer months.
- The airstrip is utilized by a variety of aircraft makes and models. Due to the density altitude experienced at Soldier Bar during summer months, high performance aircraft are required. Aircraft ranging in size from small single engine to high performance STOL capable twins like the Islander.
- Commercial use of the airstrip is prevalent to deliver people and supplies for hunting, fishing, camping, research, state and federal agency administration and hiking trips.
- The average historic use levels are unknown; there is no means in-place for tracking take-offs and landings. Use is believed to be fairly light during spring and summer months, but increases slightly during fall hunting season.
- One trail leads from the airstrip to the Big Creek trail 500' feet below. This is the only developed trail in the vicinity of the airstrip.

Restrictions and Requirements for Use of the Airstrip

- Generally open from March – December, depending on weather conditions.
 - Use at own risk – High density altitudes during summer months and surrounded by steep canyon walls in all directions.
 - Recommended for use by mountain proficient pilots using high-performance aircraft.
 - Runway has a sharp dog leg and two humps which make landings and take-offs more complex.
 - Be aware of rodent activity on and in the vicinity of the runway.
 - Multiple airstrips are located within the Big Creek drainage. Standard backcountry announcement procedures on 122.900 MHz should be employed.
 - Big game animals may be on and in the vicinity of airstrip.
 - No winter maintenance.
- Soldier Bar Airstrip lies within the Frank Church River of No Return Wilderness. Pilots and passengers must practice appropriate Leave No Trace ethics at the airstrip and surrounding areas.

General Operating Procedures for Landing, Take-off, and Parking

- Announce intentions on 122.900.
- Watch for other traffic; the Big Creek drainage receives a significant amount of traffic throughout the field season.
- Pilots should land runway 25 and depart runway 07.
- Go-arounds are not recommended.
- Pilots need to be aware of the sharp dog leg and two humps on the airstrip, which significantly impact landing and take-off procedures.
- Park aircraft in the appropriate location and utilize turn-around area properly.
- Be aware of closures communicated through NOTAM's and/or by use of yellow X's placed on both ends of the runway.

Wilderness Education/Visitor Contact

- There are no information boards or staffing at the airstrip.

Law Enforcement/Search Rescue/LifeFlight

- There are no routine or scheduled federal Law Enforcement activities planned involving the use of Soldier Bar Airstrip.
- Search and rescue (SAR) or life-flight activities would follow standard communication protocols on 122.9 during airstrip use.

- If agency aircraft are missing or known to have had an accident, Payette Dispatch is to be notified of the incident immediately and will coordinate the rescue/search according to the Interagency Aviation Mishap Response Guide and Checklist.
- If non-agency aircraft are involved in an accident or missing in the vicinity of the airstrip, Payette Dispatch should be notified and they will contact the Idaho Division of Aeronautics and/or the Idaho County Sheriff's Department who will then coordinate the response.

Support to Other Forest Service Programs

- Multiple Forest Service disciplines, such as recreation, wildlife, fisheries and fire utilize the Soldier Bar Airstrip in support of agencies mission and goals.

Maintenance Needs for the Airstrip

NOTE: If maintenance which could affect aviation operations is scheduled to occur, Payette Dispatch must be notified in advance so a NOTAM can be issued.

NOTE: Prior to planning or conducting maintenance at southeast portion of airstrip (near monument) or outside of airstrip footprint, contact Forest Heritage staff.

Maintenance will be dependent on the availability of funding and be appropriate with the minimum necessary needs for the administration of the area. All maintenance will be conducted by non-motorized/non-mechanized means unless authorized by the Forest Supervisor and supported by a Minimum Requirements Decision Guide recommendation of the District Ranger. Management Plan will be updated as needed to provide the level of maintenance required to meet the plans objectives.

Recent Soldier Bar Airstrip inspections have identified following areas in need of attention:

- The airstrip needs to have large rocks removed from the runway dimensions.
- Rodent holes need to be filled within the runway dimensions.

Due to the remote location at least one overnight stay will be needed to accomplish any significant amount of maintenance work. Work parties could vary from two to 10+ personnel depending on the project needs.

Action Area	Specific Need or Location	Type of Action (standard)	Action Frequency, How often completed	Time of Year	Quantity, Amount, or Area Treated	Estimated Cost (for reference only, costs may change)
Mowing	none	na	na	na	na	
Leveling	a. Entire airstrip as needed	Maintain a rut free level surface (+/- 2%)	As needed during the season Estimate every 3-5 years.	Beginning of season	Airstrip surface	Wilderness: \$8,000 per event (2 person team, 2-3 days; stock drawn equipment)
	b. Spot leveling ruts and holes	Fill holes and level ruts when aircraft safety is compromised	As needed	As needed	Entire airstrip	
Seeding	Bare areas	Seed bare areas with native seed as needed to prevent windborne erosion	If needed	As needed	As needed. Use 2 lbs seed per 100 sq ft: refer to FC-RONR Plan	
Drainage	Water Bar Maint.	Replace if damaged or in non-serviceable condition	As needed per inspection	As needed	Only as needed to maintain current numbers	
Painting	Windsock pole	Keep windsock pole paint in good condition	Every 3 years or as needed	As needed	One pole	

Action Area	Specific Need or Location	Type of Action (standard)	Action Frequency, How often completed	Time of Year	Quantity, Amount, or Area Treated	Estimated Cost (for reference only, costs may change)
Vegetation Control	a. Clear vertical approaches	Remove vegetation that intrudes on approach glide slope	Annually as needed, typically once every 5 years	Pre-season	Maintain 5% glide slope for 300' from runway end markers terrain permitting	
	d. Clear encroaching vegetation on runways	Remove vegetation that encroaches on runway dimensions	Annually as needed	Pre-season	Remove any woody vegetation within runway dimensions	
Clearing obstructions	Remove obstructions (fallen logs, rolled rocks)	Remove obstructions from runway surface	Annually, as needed	Pre-season and as needed	Entire airstrip	
Rock removal	Remove rocks	Remove rocks of size that pose hazard	Annually, as needed	Pre-season and as needed	Entire airstrip	
Navigation Marker Maintenance	a. Maintain windsocks	Ensure windsocks turn freely and are in fair or better condition	As needed; typically replace every 2-3 years	Pre-season	One 24" Dia. windsock	
	b. Runway markers	na	na	na	na	

Action Area	Specific Need or Location	Type of Action (standard)	Action Frequency, How often completed	Time of Year	Quantity, Amount, or Area Treated	Estimated Cost (for reference only, costs may change)
Weed Control	Control invasion and spread of noxious weeds	Remove noxious weeds, thru hand pulling or spraying	Annually, as needed	Spring, prior to seed set.	Entire airstrip	
Rodent Control	Control rodents (gophers, badgers, etc.) threatening runways	Eliminate rodent dens (holes and castings) within the runway surface	Annually, as needed	As needed to reduce impacts to runways	Entire Airstrip	
Inventory and Monitoring	Annual inspection of airstrip conditions and facilities	Annual inspection of facilities, airstrip conditions and monitoring of plans	Annually	Pre-season	Each airstrip	

Annual Budget

Will be assessed based on annual maintenance needs and funding allocation. Funding for annual, reoccurring airstrip maintenance is programmed annually and is considered discretionary funding. If a larger repair project is planned, this will be programmed commensurate with the scope of the project.

Identify Tools for Maintenance

There are no tools available at the airstrip.

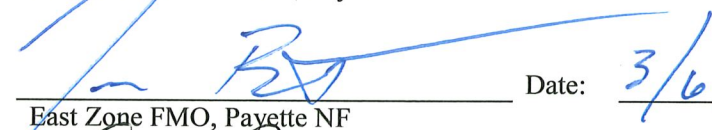
Inspections and Monitoring

- Annually, the Forest Service and State of Idaho will coordinate and conduct scheduled inspections for all 7 designated public use airstrips operated and maintained by the Forest Service (FCRONRW Plan page2-11)
- Inspections will be sent to the Forest Aviation Officer and Krassel District Recreation Branch.
- Monitoring will be conducted on an as needed basis.


Contacts

- Resource Specialist, Krassel Ranger District – Clem Pope; (208) 634-0616
cpope@fs.fed.us
- Forest Aviation Officer, Payette NF – Matt Shaddle; (208) 634-0975
mmshaddle@fs.fed.us
- Heritage Program Manager, Payette NF – Erik Whiteman; (208) 634-0750
eawhiteman@fs.fed.us
- Krassel District Ranger – Anthony Botello; (208) 634-0601
abbotello@fs.fed.us

Drafted by:  Date: 3/6/14
Forest Aviation Officer, Payette NF

Drafted by:  Date: 3/6/14
East Zone FMO, Payette NF

Reviewed by:  Date: 3/17/14
Krassel Wilderness Manager, Payette NF

Approved by:  Date: 3/17/14
Krassel District Ranger, Payette NF